

A LEATHERBACK TURTLE (*DERMOCHELYS*) FROM KAIKOURA,
NEW ZEALAND

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ABSTRACT

Measurements of a male leatherback turtle, *Dermochelys coriacea*, collected at Kaikoura, New Zealand, in March 1977, are given. Also presented are five recent records of leatherback turtles from New Zealand.

INTRODUCTION

The leatherback turtle *Dermochelys coriacea* (Linné) has seldom been recorded from New Zealand (see review below). We present here some details of a male leatherback turtle from Kaikoura, together with some other records of this species from New Zealand.

PREVIOUS RECORDS OF LEATHERBACK TURTLES FROM NEW ZEALAND

Cheeseman (1892) documented the capture and measurements of a leatherback turtle from near Cape Brett, Northland, and later (1908) reported the capture of another individual, also from Northland. Summaries of the occurrence of *Dermochelys* in New Zealand were presented by McCann (1966a,b) who gave dates and localities of eight captures or strandings, including those listed by Cheeseman. McCann (1969) also recorded the stranding in New Zealand of another individual from which was obtained the first Southern Hemisphere record of the barnacle *Stomatolepas elegans*. We know of no other published records of the leatherback in New Zealand.

NEW RECORDS OF LEATHERBACK TURTLES FROM NEW ZEALAND

Six sightings of leatherback turtles, including that specimen described in this paper, have been forwarded to the Department of Zoology. Chronologically the records are as follows:

1. G.A. Tunnickliffe, Zoologist at the Canterbury Museum, figured and briefly discussed a leatherback turtle from Jacksons Bay, Westland (grid reference about 168°40' east, 43°50' south) in the Christchurch *Press*, 4 October 1975. Mention was made also of unidentified turtles near Greymouth and Foveaux Strait.

2. G.J. Tee (pers. comm. to D.W. Tattle) reported that on 4 April 1976, he saw a large leatherback turtle near Great Barrier Island, Northland (grid reference about 175°15' east, 36°10' south). The turtle had a crest, "presumably a row of about 4 barnacles", on its head.
3. On or about 20 March 1977, a leatherback was fouled in a crayfish pot line near Kaikoura (grid reference about 173°45' east, 42°22' south). However, the turtle was discovered while still alive, and was released.
4. On 27 March 1977, the leatherback turtle described in more detail below, was obtained from Kaikoura.
5. On 27 March 1977, a yachtsman, Dennis Mathieson, saw a leatherback near Adderley Head, Banks Peninsula (grid reference about 172°50' east, 43°35' south).
6. On 3 April 1977, Barry Jones (pers. comm. to J. van Berkel) found a male turtle, a little smaller than the one found on 27 March, entangled in the line of a crayfish pot set in South Bay, Kaikoura. This animal was untangled from the line and released in good condition. We have seen a series of photographs of the incident, and the identity of the animal is not in doubt.

DETAILS OF THE KAIKOURA SPECIMEN

The specimen reported here was a male of weight about 300 kg. It was entangled and drowned in a crayfish (rock-lobster) pot line at a depth of some tens of metres on 26 March or 27 March 1977, near Kaikoura, off the east coast of New Zealand (grid reference about 173°45' east, 42°22' south). Mr P. Allen, of the fishing boat "Kirita", disentangled the turtle and presented it to the Edward Percival Marine Laboratory, Kaikoura, from whence it was taken to the Department of Zoology, University of Canterbury, Christchurch, and dissected by the authors.

Measurements are given in Table 1. Unfortunately, measurements could not be taken consistently on one side of the animal, as it was too heavy to manipulate easily.

No ectoparasites were found. Several barnacles, *Stomatolepas elegans* (Costa 1838), were situated on the wrists of the forelimbs in a position similar to that illustrated by McCann (1969: Fig. 2) for a leatherback turtle from Castle Point, North Island. One endoparasite, a tiny unidentified trematode, was found in the body cavity. No other endoparasites were seen, although a careful check of the viscera was made. The gut contained large numbers of salps (Thaliacea), the undigested clear hemicellulose tests of which formed an abundant residue in the rectum.

TABLE 1. MEASUREMENTS OF MALE LEATHERBACK TURTLE (*DERMOCHELYS*) COLLECTED AT KAIKOURA ON 27 MARCH 1977. All asterisked (*) measurements were made over the curve of the body, while other measurements were straight line distances.

Measurement	Metres
Length, maximum	2.43*
Length from tip of nose to posterior tip of carapace	2.07*
Length of carapace in midline	1.60*
Width of carapace, maximum	1.13*
Length of perimeter of carapace, right side	2.05*
Length of gape from jaw tip to angle of gape, left side	0.20*
Length, from tip of upper jaw to centre of eye, left side	0.11*
Length, from angle of gape to centre of eye, left side	0.13
Length, from tip of upper jaw to anterior insertion of fore flipper, left side	0.45
Girth of neck at level of posterior of skull	0.82*
Length, anterior profile of foreflipper, left side	1.02*
Width of foreflipper, left side, maximum	0.34*
Girth of wrist of foreflipper, right side	0.50*
Length, tip of foreflipper to centre of carapace, left side	1.31
Width of hindflipper, right side, maximum	0.31*
Length, tip of hindflipper to centre of tail, right side	0.87
Girth of hindflipper, right side, minimum	0.53*

CONCLUDING REMARKS

These records suggest that the leatherback turtle may be, at times, a common inhabitant of New Zealand seas. Its southward distribution may reflect the position of the Subtropical Convergence which is the boundary between northern Subtropical and southern Subantarctic waters (Garner 1959).

LITERATURE CITED

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